

ABSTRACT

On the back surface of a transparent plate having a light extracting part 14 for outputting lights to the outside, an electrode 16 for wiring, and an electrode 17 for an electromagnetic shield, an optical device 11 is flip-chip mounted right under the light extracting part 14, an a driver IC 12 is flip-chip mounted at a desired position with metal bumps 15. When currents driving the optical device 11 flow from the driver IC 12 according to an electric logical signal from the outside, an optical signal is emitted from the optical device 11, and is output to the outside through the light extracting part 14. The light extracting part 14 may be provided with a light coupling material or an optical axis converter.